

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. **(Canceled)**

2. **(Currently Amended):** A method of treating myocardial organ dysfunction caused by ischemia comprising administering an effective amount of G-CSF or a biologically active fragment thereof to a patient who is subjected to a surgical or interventional procedure in order to obtain a result selected from the group consisting of: to improve organ function, to improve blood flow and to induce revascularization.

3. **(Currently Amended):** The method of claim 2, wherein said pharmaceutical composition or said effective amount of G-CSF or a biologically active fragment thereof is to be administered before said surgical or interventional procedure.

4. **(Currently Amended):** The method of claim 2, wherein said pharmaceutical composition or said effective amount of G-CSF or a biologically active fragment thereof is to be administered during said surgical or interventional procedure.

5. **(Currently Amended):** The method of claim 2, wherein said pharmaceutical composition or said effective amount of G-CSF or a biologically active fragment thereof is to be administered after said surgical or interventional procedure.

6. **(Currently Amended):** The method of claim 5, wherein said pharmaceutical composition or said effective amount of G-CSF or a biologically active fragment thereof is to be administered between 2 hours and 5 days after said surgical or interventional procedure.

7. **(Canceled)**

8. **(Currently Amended):** The method of claim 2, wherein said myocardial ischemia is caused by hypertension, coronary artery disease (CAD), myocardial infarction, thrombo-embolic events, trauma and/or surgical procedures.

9-14. **(Canceled)**

15. **(Previously Presented):** The method of claim 2, wherein said ischemia causes organ defects.

16. **(Previously Presented):** The method of claim 2, wherein said surgical or interventional procedure is a procedure to regain blood flow selected from the group consisting of thrombolysis, balloon angioplasty, stenting, coronary or peripheral bypass surgery and ventriculo-coronary stenting.

17. **(Currently Amended):** The method of claim 2, wherein said pharmaceutical composition or said effective amount of G-CSF or a biologically active fragment thereof is capable of recruiting stem and/or progenitor cells.

18. **(Previously Presented):** The method of claim 17, wherein said stem cells are selected from the group consisting of CD34(+), multipotent adult progenitor cells (MAPC), endothelial progenitor cells (EPC), side population cells (SP) and lineage-negative stem cells.

19. **(Previously Presented):** The method of claim 18, wherein said multipotent adult progenitor cells are CD34(-), vascular endothelial cadherin(-) and AC133(+) and Flk1(+).

20. **(Previously Presented):** The method of claim 18, wherein said endothelial progenitor cells are CD34(+), CD31(+) and KDR(+).

21. **(Previously Presented):** The method of claim 18, wherein said cells of the side population are CD34(-)/ low, c-Kit(+) and Sca-1(+).

22. **(Previously Presented):** The method of claim 18, wherein said lineage-negative stem cells are CD5(-), CD19(-), CD34(-), c-Kit(+) and Sca-1(+).

23. **(Currently Amended):** The method of claim 17, wherein said cells are recruited to the heart home to organs which harbour defects due to ischemia.

24. **(Currently Amended):** The method of claim 23, wherein said cells are capable of repairing the heart and/or regenerating said organs.